This book is written by scientists who live in different countries (United Kingdom, Denmark, Russia), but who have graduated from, and were established as researchers at the same place: The Laboratory of Nonlinear Dynamics, Department of Physics, Saratov State University, Russia. Being apart for many years, we have united in one team again to write this book. Why?

We aim to summarize both classical results that are crucial for the understanding of the concept of synchronization, and an up-to-date account of the accompanying fascinating phenomena. The main theme that runs throughout the book is that interaction between complex systems is governed by the same universal principles. We strive to explain the material in a way that the newcomers to the field would hopefully appreciate, namely,

- From simple calculations to advanced theoretical approaches
- From simple dynamics to complex behavior
- From mathematical and physical to general perspectives

Assuming only the basic knowledge of mathematics, our book takes the reader to the frontiers of what is currently known about this research area.

The classical approach to synchronization we have learned by heart during our regular and inevitably hot discussions, and most of the results on the new synchronization phenomena we obtained together. It is therefore difficult to separate scientific contribution and to compare the efforts made by each co-author, so we decided to arrange the list of authors in alphabetic order to emphasize an equal investment of their time, ideas and enthusiasm.

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